

Grist Mill,
Garrison, Putnam County,
New York.

HABS No. 4-108

HABS
N.Y.,
40-GAR,
2

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

District No. 4
Southern New York State

Historic American Buildings Survey
Wm. Dewey Foster, District Officer,
25 West 45th Street, New York City.

THE GRIST MILL
At Garrison, Putnam County, N.Y.

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Location, Owner and Probably Date

This old mill - one of the very few remaining in which the machinery is practically intact - is located beside a small stream on the golf course of the Highland Country Club at Garrison, Putnam County, on the east side of the Hudson river opposite West Point, N. Y.

It is a most interesting example of the simple but effective milling machinery of a hundred years ago; for, while its exact date is probably indeterminable, it is evidently as old as that, judging from its construction, the materials used, and information gathered by living witnesses. Mr. William Church Osborn, one of the organizers of the Club remembers seeing it in operation sixty years ago.

Architectural Description

Due to Mr. Osborn's care, the building and contents are in a good state of preservation, although the water-wheel and east wing are entirely missing. Externally, the building is of simple rectangular shape, its sides covered with shingles, and having a great overhang of roof on the west gable to protect the grain-hoist. The shingle roof is covered with a tar roofing composition.

On the east gable is evidence of the remains of a former building which housed the water-wheel and main drive, a cider-mill and a saw-mill.

The construction of the building is of peculiar interest in that its framing forms the support for the machinery and is merely sheathed and roofed for its protection. This framing is made of 10 by 10 inch

oak posts, ties and braces, morticed, tenoned and pegged, and beautifully finished.

The drawings indicate the complete operation of the machinery. The water-wheel itself is gone, and the main drive outside the building has fallen into decay, but all the rest of the machinery with the exception of the belting is in ^{an} almost perfect state of preservation and could readily be made to operate.

The water-wheel was on a wooden shaft, 19 inches in diameter, which was wedged and bolted to the main drive-wheel of wood. This wheel has hard-wood pegs for cogs. Operating with cast-iron bevel gears, it drove the horizontal drive-shaft, 15 inches in diameter, located under the main floor. Midway on this shaft is the flour millstone drive-wheel, also of wood, 8 feet in diameter and with wooden cogs. The bearing carrying the weight of the mill-stones has a shoe of iron, all other bearings being of wood.

At the end of the horizontal drive-shaft is a bevelled gear and a vertical shaft extending to the roof with only one sulice. This shaft, octagonal in shape and 12 inches in diameter, is made of an unidentified hardwood, beautiful in grain and finish like a piece of fine furniture. Much of the shafting, the bolsters, braces and machinery supports are made of black walnut.

Most of the preliminary millwork and the grinding itself were done on the top floor. There, on the main vertical shaft, is a grinder, probably for corn. There are evidences of a conveyer-belt coming from the second floor where the stock of grain was stored.

From the top of the main vertical shaft is run the machinery for sifting the wheat. The bolt, an hexagonal-shaped wire mesh-covered sieve, revolving at a pitch of its axis by the use of a universal

joint, cleaned the wheat, which then dropped to a grinder for freeing the chaff or hulls. From there it went through a box containing a wooden-bladed fan which blew away the chaff, the wheat going through a hole in the floor to a trough which led it to millstones located on a half-story between the first and second floors.

Within the memory of local residents the cider-mill and saw-mill were still in operation. These were presumably driven from the end of the water-wheel shaft. The old-style saw-mill consisted of a huge flat blade, vertically hung, which rose and fell like a jig-saw. But the leanto which contained the cider-mill and saw-mill was long ago destroyed and its machinery removed. (From field-notes of James Albro, architect, Chappaqua, Westchester Co., N. Y.)

Its Social Significance

This old grist-mill offers a subject of peculiar attraction for the present survey, not only because of the unusual fact that the machinery is almost entirely preserved and the operation of its various parts can easily be traced; but also because it presents an interesting sociological study. At the time it was built, and while it was in operation throughout its long and probably very busy life, this mill, like every other town grist-mill, was always a vitally necessary part of the community which depended upon it for the grinding of its corn and wheat. In the case of this mill, it served the additional purpose of making its cider and sawing its timber into lumber.

Reconditioned and preserved in an operating state, it would serve as a most perfect relic and social record of its kind. The grist-mill only needs a raceway and locks, new water-wheel, a reconstructed main drive, and some minor improvements.

Revised 1936 by H.C.F.

Written, April 21, 1934, by

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